#### DOE/NV 1995 WASTE GENERATOR WORKSHOP PRESENTATION PROPOSALS

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# Topic of Presentation:

"The Characterization and Certification of Low-Level Legacy Waste at Lawrence Livermore National Laboratory"

## Relevant Section of NVO 325:

Section 4.1 "Waste Characterization by Process Knowledge"

## Specific Issue:

"Using Process Knowledge to Characterize Legacy Waste"

### Abstract:

The characterization and certification of low-level legacy waste at Lawrence Livermore National Laboratory is a three-step process, consisting of: (1) a process knowledge evaluation that validates information provided by the waste generator and provides a vehicle for reviewing regulated hazardous constituents by a RCRA specialist; (2) a confirmation process using real-time radiography or visual evaluation; and (3) radiological characterization that validates generator-supplied data and provides for identification and quantification of radioisotopes.

Candidates for certification are listed on a Process Knowledge Evaluation (PKE) form and submitted to the Waste Certification Program for evaluation and review. Generators and/or other knowledgeable individuals are contacted and interviewed. Documented evidence of interviews, logbooks, procedures, or other documentation that may aid in characterization of the waste are used to create a waste stream characterization information packet. An Environmental Analyst reviews the PKE form for RCRA- or California-regulated hazardous constituents.

Real-time radiography (RTR) is currently conducted by a commercial vendor. The data collected during RTR are recorded on videotape, with voice annotations of the actual examination. The container is visually examined if the RTR data do not confirm the information provided by the generators on their waste disposal requisition form.

Radiological characterization is managed by a health physicist who selects the method used for characterization. Additionally, the health physicist determines what procedures to follow, what instruments are required, and, when appropriate, by what method to supply calibration data.

A certification report is generated to assure all the steps are complete and signal that approval has been given by the Waste Certification Program to proceed with routine waste certification in accordance with the Program's established procedures.

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